

# Publication of official NAV breeding values

## - The information behind and criteria for publication

- This provides an overview of when different groups receive official breeding values from NAV
- There are 3 different groups:
  - **Group 1** - All AI bulls where the basic publication fee for breeding values has been paid (AI bulls owned by VikingGenetics, Eurogenomics partners or a third party)
  - **Group 2** - All bulls not in group 1
  - **Group 3** - Genotyped cows and heifers
- There are two types of fees for publication of breeding values:
  - The basic publication fee for breeding values
    - All indices except indices for growth, young stock survival, other disease and claw health are published
  - The publication fee for Nordic traits
    - Indices for growth, young stock survival, other disease and claw health are published

**Group 1:** All AI bulls where the basic publication fee for breeding values has been paid (AI bulls owned by VikingGenetics, Eurogenomics partners or a third party)

Only genomic information

Genomic information and progeny records

Bulls under 10 months

Bulls over 10 months

Bulls with Nordic progeny groups that have an accuracy above the EBV publication threshold (appendix 1)

Bulls that have Interbull indices but without a Nordic progeny group

No official indices are published

The publication fee for Nordic traits is paid

The publication fee for Nordic traits is not paid

Indices based on genomic information and Nordic progeny information

Indices based on information from Nordic offspring, only if the reliability is above the transition threshold (appendix 2).

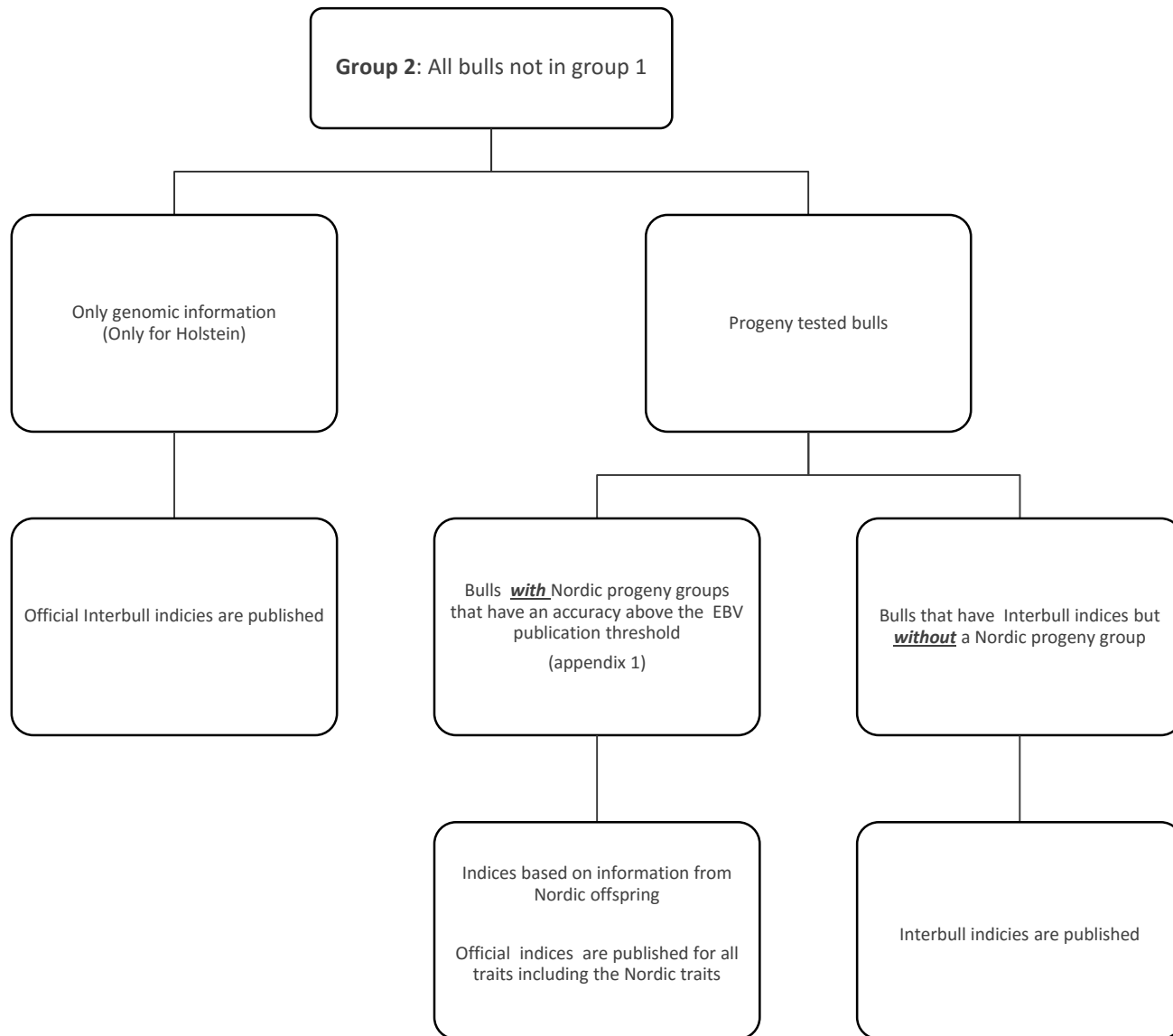
Official indices based are published for all traits including the Nordic traits

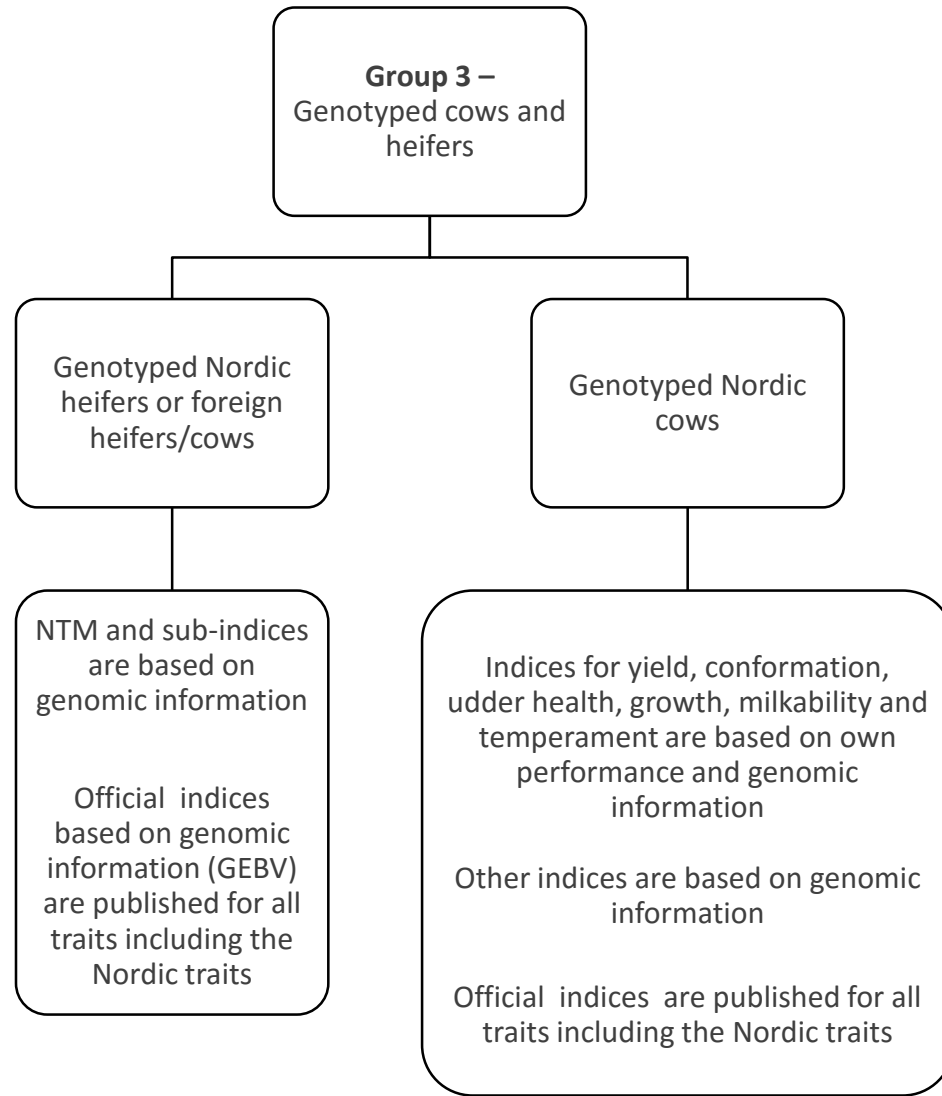
Indices based on genomic information and foreign progeny information

Interbull indices are published for the yield index if the reliability is above the transition threshold for Interbull indices (appendix 3)

Official indices based on genomic information (GEBV) are published for all traits including the Nordic traits

Official indices based on genomic information (GEBV) are published for all traits not including the Nordic traits





## Appendix 1 – Threshold of transition from GEBV to GEBV with information from Nordic offspring

Traits	Threshold of transition from GEBV (based ONLY on genomic information) to GEBV (based on BOTH genomic information and information from Nordic offspring)
Yield	60 % accuracy and 10 daughters
Conformation	15 daughters
Milkability	15 daughters or conformation above the threshold
Temperament	Published if conformation is above the threshold
Fertility	35 % accuracy
Udder health	40 % accuracy
Calving	40 % accuracy
Birth	50 % accuracy
Other diseases	35 % accuracy
Longevity	50 % accuracy
Growth	60 % accuracy (Jersey 50 %)
Claw health	35 % accuracy
Young stock survival	40 % accuracy

## Appendix 2 – Threshold for transition from GEBV to EBV

Traits	Threshold of transition from EBV based on BOTH genomic information and information from Nordic offspring to EBV based ONLY on Nordic offspring
Yield	90 % accuracy
Conformation	50 daughters
Milkability	50 daughters or conformation above the threshold
Temperament	Published if conformation is above the threshold
Fertility	75 % accuracy
Udder health	75 % accuracy
Calving	75 % accuracy (Jersey 40 %)
Birth	75 % accuracy
Other diseases	75 % accuracy (Jersey 35 %)
Longevity	75 % accuracy
Growth	75 % accuracy (Jersey 50 %)
Claw health	75 % accuracy (Jersey 40 %)
Young stock survival	75 % accuracy

## Appendix 3 – Threshold for transition from GEBV to EBV for Interbull indicies

Traits	Threshold of transition from GEBV based on BOTH genomic information and INTERBULL information to EBV based ONLY on INTERBULL information
Yield	90 % accuracy
Conformation	
Milkability	
Temperament	
Fertility	
Udder health	
Calving	
Birth	
Other diseases	
Longevity	
Growth	
Claw health	
Young stock survival	